

INTERNATIONAL SEARCH REPORT

International Application No

T/BR2004/000129

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B65D43/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 476 993 A (KROUT GERALD R) 16 October 1984 (1984-10-16)	1-5
Y	column 2, line 18 - column 3, line 42; figures 2-4	8
Y	----- US 4 512 493 A (VON HOLDT JOHN W) 23 April 1985 (1985-04-23) figures 1,2	8
A	----- EP 0 147 507 A (SANNER FRIEDR GMBH CO KG) 10 July 1985 (1985-07-10) figures 1,2	1-8
A	----- US 3 557 998 A (COLLIE STAFFORD D) 26 January 1971 (1971-01-26) figures 1,4	1-8
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

10 November 2004

Date of mailing of the international search report

18/11/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 236 099 A (METAL BOX PLC) 27 March 1991 (1991-03-27) figures 2,3 -----	1-8
A	US 2003/089715 A1 (SENE ANTONIO ROBERTO ET AL) 15 May 2003 (2003-05-15) figure 2 -----	1-8

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4476993	A	16-10-1984	NONE	
US 4512493	A	23-04-1985	US 4452382 A US 4380305 A US 4420093 A JP 60045135 A	05-06-1984 19-04-1983 13-12-1983 11-03-1985
EP 0147507	A	10-07-1985	DE 3346928 A1 EP 0147507 A2	04-07-1985 10-07-1985
US 3557998	A	26-01-1971	NONE	
GB 2236099	A	27-03-1991	NONE	
US 2003089715	A1	15-05-2003	BR 0003727 A AU 7374601 A WO 0198165 A2 CA 2404967 A1 DE 60105809 D1 EP 1292505 A2 JP 2003535780 T MX PA02012609 A ZA 200207065 A	13-02-2002 02-01-2002 27-12-2001 27-12-2001 28-10-2004 19-03-2003 02-12-2003 10-04-2003 15-10-2003

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 15 NOV 2005

WIPO

PCT

Applicant's or agent's file reference BLATA-005	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/BR2004/000129	International filing date (day/month/year) 22.07.2004	Priority date (day/month/year) 24.07.2003	
International Patent Classification (IPC) or national classification and IPC B65D43/02			
Applicant BRASILATA S.A. EMBALAGENS METALICAS et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in Item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 22.02.2005		Date of completion of this report 20.10.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Fitterer, J Telephone No. +49 89 2399-7916	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/BR2004/000129

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-9 as originally filed

Claims, Numbers

1-8 filed with the demand

Drawings, Sheets

1/4-4/4 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/BR2004/000129

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3,6-8
	No: Claims	1,2,4,5
Inventive step (IS)	Yes: Claims	6,7
	No: Claims	1-5,8
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following documents:

- D1: US-A-4 476 993 (KROUT GERALD R) 16 October 1984 (1984-10-16)
- D2: US-A-4 512 493 (VON HOLDT JOHN W) 23 April 1985 (1985-04-23)
- D3: US 2003/089715 A1 (SENE ANTONIO ROBERTO ET AL) 15 May 2003 (2003-05-15)

2 INDEPENDENT CLAIM

Claim 1 does not meet the criteria of Article 33(1) PCT, because its subject-matter is not new in the sense of Article 33(2) PCT.

Document D1 discloses (cf. column 2, line 18 - column 3, line 42; figures 2-4) a plastic lid suitable for a can of the type which comprises a tubular body having a lower end and an upper end carrying a seat for the hermetic seating of a lid (14) which comprises, in a single piece, a sealing portion, removably seated and retained in the seat of the can and which is provided with an external edge (22) projecting radially outwardly from the seat; a tamper evident portion (26) comprising a lower skirt, to be seated around part of the upper end (20) of the body (12) and which is superiorly incorporated, through bridges (cf. 24), to the external edge (22) of the sealing portion, the tamper evident portion (26) presenting an interruption (between the pull tabs (40, 42); see figure 4) extending along the height of the lower skirt, the sealing portion incorporating, at its external edge (22), a gripping tab projecting through said interruption (between the pull tabs (40, 42); see figure 4) of the tamper evident portion (26), said bridges (cf. 24) being broken when submitted to a certain pulling force, which separates the tamper evident portion (26) from the sealing portion upon the first opening of the lid (14), the bridges (cf. 24) being axially disposed around a circumferential extension of the upper end (20) of the body (12), in order to connect an upper edge of the lower skirt of the tamper evident portion (26) with the external edge (22) of the sealing portion in points which are angularly spaced apart, said gripping tab maintaining a gap with the lower skirt of the tamper evident portion (26) (said gap being the cuts between

the portion (22) and the pull tabs (40, 42), see figure 4).

All features of claim 1 are therefore disclosed in combination in D1.

3 DEPENDENT CLAIMS

- 3.1 Dependent claims 2-5, 8 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), the reasons being as follows:

All features of claims 2, 4, 5 are known in combination from D1, figures 2-4.

The subject-matter of claim 3 differs from the construction according to D1 in that the upper end of the body comprises a double seam securing an annular wall in which is defined the seat for the seating of the lid. However, this feature is well known (see for example D3, figure 2), thus the person skilled in the art would incorporate said feature, without the exercise of inventive skill, where circumstances make it desirable.

The additional feature of claim 8 has already been employed for the same purpose in a similar lid for a container, see document D2, figures 1, 2. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply this feature with corresponding effect to a lid according to document D1, thereby arriving at a lid according to claim 8 without the exercise of inventive skill.

- 3.2 A bridge according to claim 6 is not disclosed in the available prior art documents. Furthermore, there is no hint which would lead the skilled person to incorporate such a bridge in the lid of D1. Hence, the combination of the features of dependent claim 6 is neither known from, nor rendered obvious by, the available prior art.

The subject-matter of claim 6 (and claim 7 which depends on claim 6) is new, inventive and industrially applicable.

CLAIMS

1. An improvement in a plastic lid for a can of the type which comprises a tubular body (10) having a lower end (11) and an upper end (13) carrying a seat (16) for the hermetic seating of a lid (20) which comprises, in a single piece, a sealing portion (21), removably seated and retained in the seat (16) and which is provided with an external edge (21b) projecting radially outwardly from the seat (16); a tamper evident portion (25) comprising a lower skirt (25a), to be seated around part of the upper end (13) of the tubular body (10) and which is superiorly incorporated, through bridges (26), to the external edge (21b) of the sealing portion (21), the tamper evident portion (25) presenting an interruption (25c) extending along at least part of the height of the lower skirt (25a), the sealing portion (21) incorporating, at its external edge (21b), a gripping tab (27) projecting through said interruption (25c) of the tamper evident portion (25), said bridges (26) being broken when submitted to a certain pulling force, which separates the tamper evident portion (25) from the sealing portion (21) upon the first opening of the lid (20), characterized in that the bridges (26) are axially disposed around a circumferential extension of the upper end (13) of the tubular body (10), in order to connect an upper edge (25b) of the lower skirt (25a) with the external edge (21b) of the sealing portion (21) in points which are angularly spaced apart, said gripping tab (27) maintaining a gap (29) with the lower skirt (25a).
2. The improvement as set forth in claim 1, characterized in that the external end (21b) of the sealing portion (21) incorporates a small cylindrical lower flap (21c) surrounding a circumferential

extension of the upper end (13) of the tubular body (10) from which the bridges (26) depend.

3. The improvement as set forth in any of claims 1 or 2, in which the upper end (13) of the tubular body (10) secures, by a double seam (14), an annular wall (15) in which is defined the seat (16) for the seating of the lid (20), characterized in that the lower skirt (25a) incorporates an internal circumferential projection (25h), axially spaced from the external edge (21b) of the sealing portion (21) and which is dimensioned to be seated and axially locked under the double seam (14), around the tubular body (10).

4. The improvement as set forth in claim 1, characterized in that the gripping tab (27) is substantially leveled with the lower skirt (25a).

5. The improvement as set forth in claim 1, characterized in that the tamper evident portion (25) comprises at least one breakable lock (28) connecting the gripping tab (27) with the lower skirt (25a).

6. The improvement as set forth in claim 1, characterized in that the lower skirt (25a) incorporates the ends of a bridge (25d), circumferentially extending over the interruption (25c) of the tamper evident portion (25) and over the gripping tab (27), a first end (25e) of said ends of the bridge (25f) being incorporated to the lower skirt (25a) through connecting means (25f) which are broken when said first end (25e) is forced away from the lower skirt (25a), in order to liberate the manual access to the gripping tab (27).

7. The improvement as set forth in claim 6, characterized in that the bridge (25d) has its first end (25e) superposed to the lower skirt (25a) and incorporated thereto by two connecting means (25e) which are circumferentially spaced apart.

8. The improvement as set forth in claim 1, characterized in that the upper end (21b) of the sealing portion (21) incorporates a circumferential upper rib (25g), projecting over the upper end (13) of the tubular body (10), so as to fit loosely and telescopically in the lower end (11) of another tubular body (10) stacked over said tubular body (10).